

SESSION II: ENGAGING THE POOR TO MITIGATE EMISSIONS
FRIDAY, AUGUST 1, 10:15-12:45 P.M.

TOWARDS A NEW INTERNATIONAL CLIMATE CHANGE AGREEMENT

Elliot Diringer

Pew Center on Global Climate Change

(A draft version of a chapter forthcoming in the book, *Development in the Balance: How Will the World's Poor Cope with Climate Change?*, to be published by the Brookings Institution Press)

EXECUTIVE SUMMARY:

A successful post-2012 climate agreement must engage all the world's major economies through a "multi-track" framework allowing different types of commitments for developed and developing countries. The 25 major economies accounting for 84 percent of global emissions are extremely diverse, with per capita incomes and per capita emissions ranging by a factor of 18. Strategies for integrating climate action with broader economic and development agendas will vary with national circumstance. Accommodating these differences requires a flexible but binding international framework integrating different types of commitments, such as economy-wide emission targets, policy-based commitments, and sectoral agreements. Incentives for developing countries, including both market-based schemes and direct assistance, also must be provided. A post-2012 agreement might advance adaptation on two fronts: proactively, by facilitating comprehensive national planning; and reactively, by helping countries cope with the risks that remain. Given the time it will take a new U.S. administration and Congress to establish a domestic climate policy, a detailed post-2012 agreement is unlikely when governments meet in late 2009 in Copenhagen. Instead, governments should aim for consensus on a broad framework and continue negotiating toward specific commitments.

VISIT...

LANZAROTE
Caliente.COM

For most of the past decade, even as the effects of global warming swung from largely theoretical to distressingly real, international climate change negotiations have barely inched forward. But two high-profile events seem likely to ensure that in 2009 the search for a global solution to the growing climate crisis will shift into high gear.

The first is the inauguration in January of a new U.S. president. Quite arguably, lack of will on the part of the United States has been the single greatest constraint on the international climate effort, no more so than in the recent past. But with public concern rising, states taking action, and support growing in Congress, the drive toward mandatory legislation to cap and reduce U.S. emissions is gaining momentum. Both John McCain and Barack Obama, the presumed nominees, have pledged that if elected president they will move quickly on the issue on both domestic and international fronts.

The second event is the U.N. climate change summit in Copenhagen. At the last summit in Bali, the latest findings of the Intergovernmental Panel on Climate Change injected a strong new sense of urgency. Yet governments could agree on little more than the need for a deadline. Hopeful that the upcoming U.S. election would allow a breakthrough, they set December 2009 in Copenhagen as the time and place for a new global climate agreement.

The 10 months from Washington to Copenhagen present a sudden moment of opportunity—and a considerable risk of expectations unmet. The stakes are higher for no one than for the poor. A new climate agreement must address the needs of humanity's least fortunate in several ways. First and foremost, it must forestall the most severe of the myriad climate impacts destined to fall disproportionately on those already at the margins. Second, a new agreement must engage developing countries in ways that foster, not stifle, opportunities for sustainable growth and development. Third, it must help the poorest and most vulnerable cope with those climate impacts that are now too late to prevent.

This paper outlines the broad contours of an effective post-2012 climate agreement. It begins by defining the challenge as one of enlisting the world's major economies in a binding but flexible "multi-track" framework. It examines key elements this framework must contain, and highlights the critical political challenges it must overcome. Finally, the paper assesses the prospects for agreement in Copenhagen.

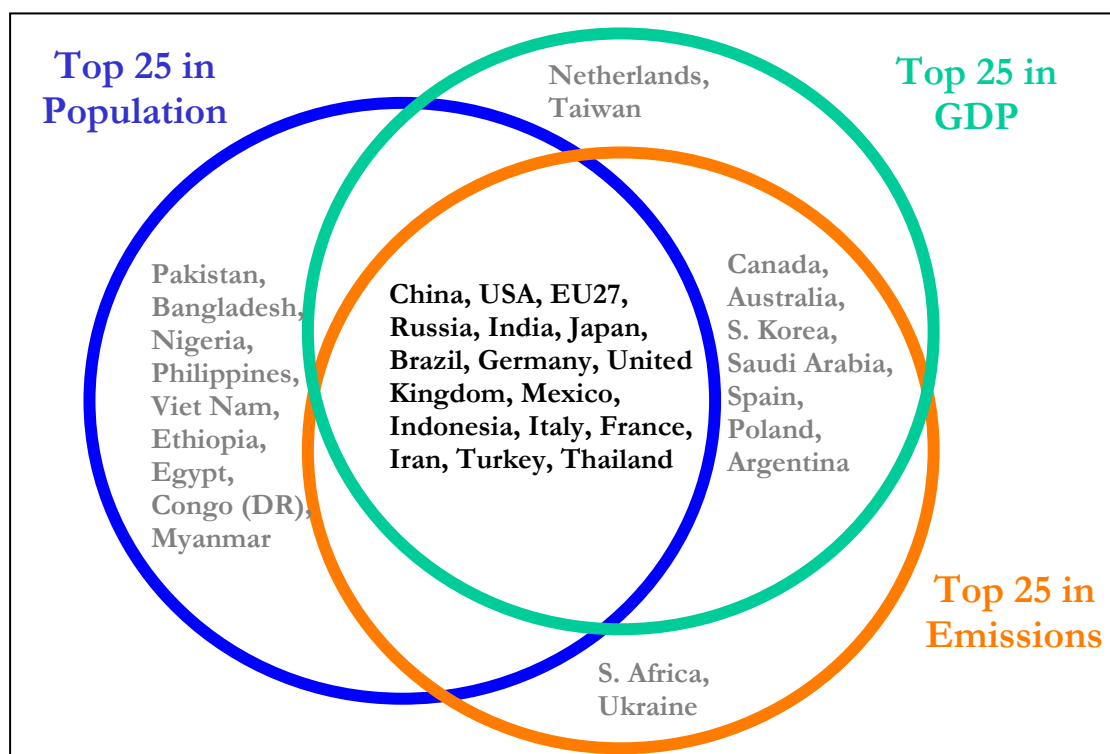
ENGAGING THE MAJOR ECONOMIES¹

The core international challenge in addressing climate mitigation—and, by extension, climate adaptation—is arriving at fair and effective commitments among the world's major economies. They are ones whose actions are needed to reduce global emissions, and the ones best able to help poor, vulnerable countries cope with climate impacts.

¹ Much of the framing for this paper is drawn from "International Climate Efforts Beyond 2012 – Report of the Climate Dialogue at Pocantico." The Pocantico dialogue, convened by the Pew Center on Global Climate Change, brought together 25 senior policymakers and stakeholders from 15 countries, including the United States, Britain, Germany, Japan, Australia, China, India, Brazil, Mexico and South Africa. The group's consensus report is available at <http://pewclimate.org/pocantico.cfm>.

Twenty-five economies (counting the European Union as one) account for 84 percent of global emissions. These same countries account for 74 percent of global population, and 90 percent of global GDP. It is obvious enough why the engagement of the major economies is an environmental imperative—steep cuts in global emissions are not possible without them. But it is imperative politically as well. There are costs to reducing emissions and when only some bear them—because they are the only ones acting—these countries may risk harm to their industrial competitiveness. For any to sustain ambitious climate efforts, they must therefore be confident that their counterparts (and competitors) are also contributing their fair share. The best way to instill this confidence is through a balanced set of commitments that are clear, verifiable, and in some way binding.

Figure 1.



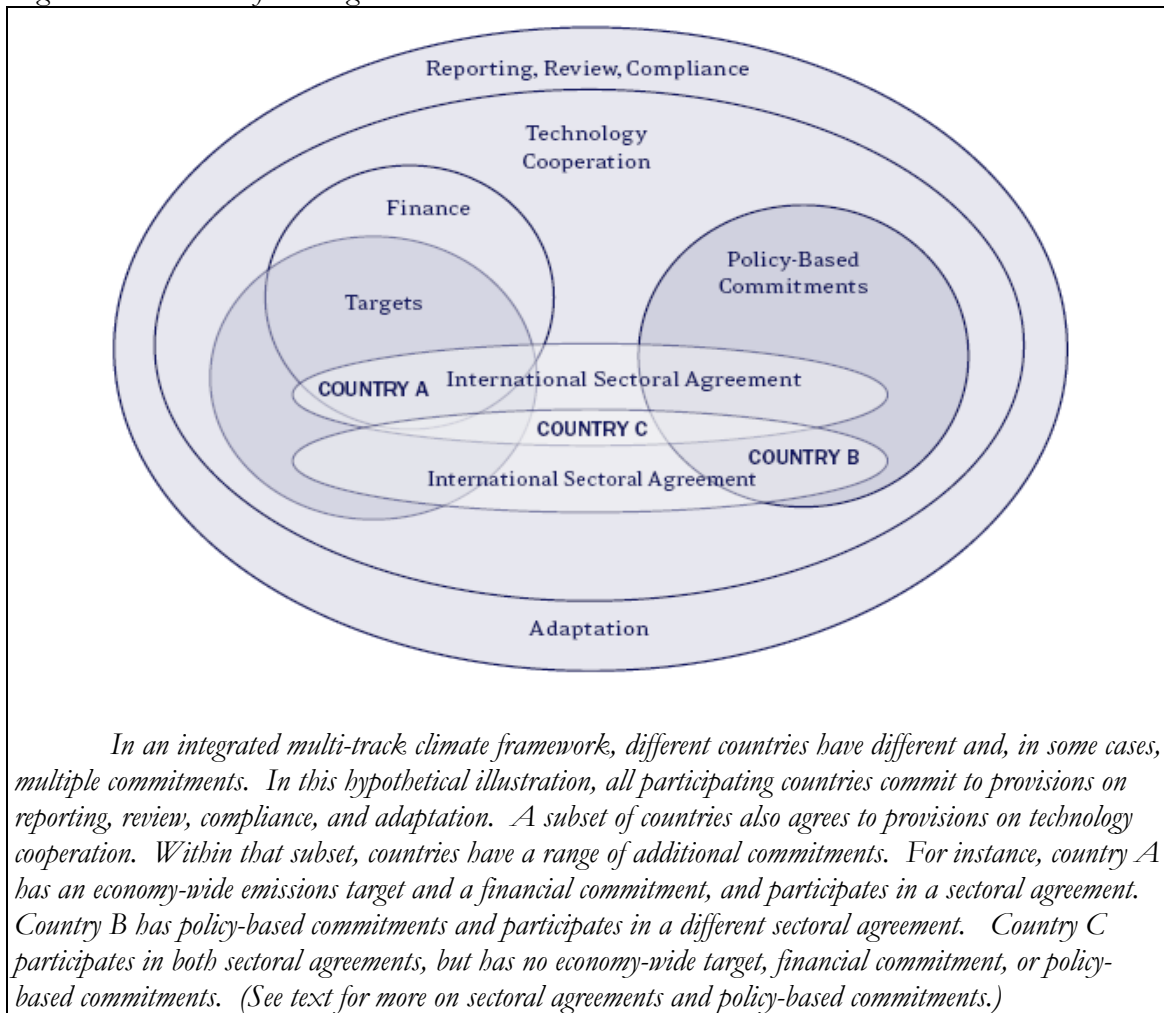
Sources: IEA, *CO₂ Emissions from Fossil Fuel Combustion 1971-2005* (2007); EPA, *Global Anthropogenic Non-CO₂ Greenhouse Gas Emissions: 1990-2020* (2006); World Bank, *World Development Indicators 2008* (2008).

Mitigation commitments by all major economies may only be feasible, however, with some flexibility in the *form* of their commitments. In their stages of development, economic structures, policy cultures, resource bases, etc., the 25 largest emitters are extremely diverse. Their per capita incomes and per capita emissions range by a factor of 18. The kinds of policies that can successfully integrate climate action into broader economic and development agendas vary from country to country. To accommodate these differences in circumstance and strategy, a new agreement will have to allow for different types of mitigation commitments.

On adaptation, it is for the most part not the major economies, but a different set of countries, that have the most at stake: small island and low-lying nations losing ground to rising seas, and poor African countries facing greater risk of drought, disease, and famine. Yet here, too, an effective response hinges on agreement among the major economies. It is the major developed countries that have the resources—and, in the eyes of many, the responsibility—to help these countries absorb the impacts of warming. And they are only likely to commit substantial resources as part of a deal in which the major emerging economies commit to reduce their emissions.

The type of architecture that would most effectively marshal the major economies on both mitigation and adaptation could be described as an “integrated multi-track” framework: “multi-track” because it contains multiple commitment types, or tracks, and countries have some choice among them; “integrated” because these varied efforts are linked in a single, unifying structure (see figure 2).²

Figure 2. Illustration of an Integrated Multi-Track Climate Framework



Source: Adapted from Bodansky and Diringer, 2007.

² D. Bodansky and E. Diringer, “Towards an Integrated Multi-Track Climate Framework” (Arlington, VA: Pew Center on Global Climate Change, 2007).

Other international agreements such as the World Trade Organization and the Law of the Sea bear the characteristics of an “integrated multi-track” approach. Generally, their histories suggest the importance of balancing flexibility and integration. Too strong an emphasis on integration at the start can deter participation. Flexibility helps broaden participation; but too much flexibility can result in too little effort. Many agreements that initially offered wide variability later evolved toward greater consistency and integration, gradually achieving stronger reciprocity and commitments. Typically, however, this progression took far longer than can be afforded in the case of climate change. Given the scale and urgency of the climate challenge, a post-2012 framework must from the start offer flexibility to secure broad participation, yet be integrated enough to deliver strong, sustained action.

The agreed forum for the post-2012 negotiations is the UN Framework Convention on Climate Change, the 1992 treaty that launched the global climate effort and later spawned the Kyoto Protocol. Virtually every country on earth, including the United States, is party to the Framework Convention. With their decision in Bali, governments have now launched parallel negotiating tracks under Kyoto and the Convention with the aim of a comprehensive new agreement in Copenhagen. Whether achieved in Copenhagen or later, this likely would be a package agreement integrating elements under the Convention and the Protocol, and possibly incorporating new instruments as well.

But a successful negotiation will first require stronger consensus among the major economies on the broad terms, and that may be more readily achievable outside the formal UN process. Since 2005, the G8 leaders have invited counterparts from the “plus-5” countries (China, India, Mexico, Brazil, and South Africa) to their annual summits for side discussions on climate and other issues. In 2007, with the G8’s endorsement, the United States launched a series of Major Economies Meetings (MEM) with the aim of building consensus toward a global agreement in 2009. However, there was little progress at the leaders summit President Bush convened a year later in Hokkaido, Japan. The MEM brought the key countries together around an ambitious agenda, but lacked what other governments viewed as a credible offer on U.S. action (the president had proposed that U.S. emissions peak in 2025). Some kind of successor process appears likely, and with a new administration in Washington, there will likely be stronger prospects for a climate consensus among the major economies.

ELEMENTS OF AN AGREEMENT

The ultimate configuration of a post-2012 climate framework can emerge only through the negotiations themselves. But the essential elements are reasonably clear. A comprehensive agreement must include mitigation commitments by the major emitting countries, technology assistance and other incentives for developing country action, and support for climate adaptation in poor, vulnerable countries.

Mitigation

Effective mitigation commitments can take three basic forms: emission targets, policy-based commitments, and sectoral agreements. From the standpoint of environmental

effectiveness and economic efficiency, absolute economy-wide emission targets, like those set by the Kyoto Protocol, are the clear favorite. They establish clear and verifiable environmental endpoints. And they provide a foundation for emissions trading—the buying and selling of emission allowances—which harnesses market forces to achieve reductions at the lowest possible cost. This market-based approach was first championed by the United States, based on its success in combating acid rain, and most of the major climate bills before Congress favor an economy-wide cap-and-trade system as the cornerstone of federal climate regulation.

Stronger absolute targets for all developed countries are essential in a post-2012 agreement, both to drive substantial emission reductions and to sustain and strengthen the emerging greenhouse gas market. Those countries with targets under the Kyoto Protocol have already agreed to negotiate new ones. Although the United States remains outside Kyoto, the establishment of a domestic cap-and-trade system should position it to join other industrialized countries in assuming a binding international emissions target.

On pure policy grounds, environmental effectiveness and economic efficiency would argue for extending this approach globally, with all the major economies committing to binding absolute targets. Indeed, this may be the long-term ideal towards which the climate regime should evolve. But it is not feasible now. China, India, and other developing countries have made clear that they will not accept economy-wide emission limits. With standards of living well below the global average, they are fearful of jeopardizing their growing economies and will have to be persuaded by the example of developed countries that a cap on emissions is not a cap on growth. Developing countries are not prepared at a practical level either. Few if any have the capacity to reliably quantify their current (let alone project their future) emissions, something a government needs to be able to do before committing to an economy-wide target.

An alternative approach for developing countries is “policy-based commitments”—making an international commitment to implement specific nationally defined policies that will reduce emissions.³ Such commitments could be readily tailored to national circumstance, and could flow directly from domestic policies that are driven by other priorities, such as energy security, economic growth, or cleaner air, but simultaneously deliver climate co-benefits. China, for example, has domestic energy efficiency targets, renewable energy goals, and automobile fuel economy standards; some version of these could be put forward as international commitments. Tropical forest countries such as Brazil or Indonesia could commit to policies to reduce deforestation. Others might put forward policies to reduce industrial emissions.

China published a comprehensive National Climate Change Programme in 2007, and India released its own National Action Plan on Climate Change a year later. Both describe ongoing policies contributing to climate mitigation or adaptation and outline future policy directions; China’s includes emission reduction estimates for many of its policies. The idea of reflecting such national plans in the international framework has been introduced in the negotiations in the form of a South African proposal for voluntary “sustainable development

³ J. Lewis and E. Diringer, “Policy-Based Commitments in a Post-2012 Climate Framework” (Arlington, VA: Pew Center on Global Climate Change, 2007).

policies and measures,” or SD-PAMs.⁴ To be credible, a policies approach would have to be binding, not voluntary. And while countries would not be committing to quantified emission levels, their commitments would have to be quantifiable and verifiable. At the time a commitment is put forward, other countries must be able to assess its likely contribution to emissions reduction. And some mechanism is needed to later assess what actually has been achieved.

A third form of mitigation commitment—in addition to targets and policy commitments—is sectoral agreements.⁵ Countries, both developed and developing, could commit to targets, standards, or other measures to reduce emissions from one or more given sectors. The case for sectoral agreements is strongest in the case of energy-intensive, globally traded industries, such as iron, aluminum, and cement, where uneven carbon regulation poses the greatest risk of competitive imbalances. Sectoral agreements could also help to target efforts in key sectors such as electric power, where international technology cooperation is perhaps most critical, and transportation, where commitments among a handful of countries on fuel and efficiency standards could effectively transform the global automotive market. For a developing country, a sectoral agreement might be in addition to, or in lieu of, a policy-based commitment. For a developed country, a sectoral commitment would be parallel to its economy-wide target, and one means of achieving it.

Incentives for Developing Country Action

In the case of developing countries, commitments will come only in exchange for incentives. These can take two forms—market-based incentives, in which countries earn tradable emission credits for reducing their emissions, and official development assistance from developed countries. Many developing countries are earning emission credits now under Kyoto’s Clean Development Mechanism, which has demonstrated both the weaknesses and the promise of the crediting approach.⁶ A post-2012 agreement will almost certainly include a redesigned crediting mechanism that moves beyond a project-by-project approach to reward reductions on a broader scale. One possibility is to complement policy-based commitments with “policy crediting”—allowing a country to earn credits for a portion of the reductions achieved under a committed policy. This creates a market incentive to assume, and to fulfill, a policy-based commitment. A crediting approach works, however, only if there is demand for the credits developing countries are generating, which in turn necessitates strong absolute targets for developed countries.

Developed countries also must be prepared to provide more direct assistance. As an interim step, the United States, Britain and Japan recently led an effort to establish a new

⁴ Government of South Africa, “Sustainable Development Policies and Measures,” Dialogue Working Paper 18, submission by the Government of South Africa to the 2nd workshop of the ‘Dialogue on long-term cooperative action to address climate change by enhancing implementation of the Convention’ (2006). Available at http://unfccc.int/files/meetings/dialogue/application/pdf/working_paper_18_south_africa.pdf.

⁵ D. Bodansky, “International Sectoral Agreements in a Post-2012 Climate Framework” (Arlington, VA: Pew Center on Global Climate Change, 2007).

⁶ The Clean Development Mechanism (CDM) allows the creation of marketable emissions credits for verified emission reductions in developing countries. These credits can be purchased by developed countries and applied towards meeting their Kyoto targets. As of mid-2008, more than 1,000 projects generating more than 1 billion tons of emission credits had been approved. Approximately \$10 billion in credits were traded in the first half of 2008.

Clean Technology Fund at the World Bank projected to deliver \$5 billion or more for technology deployment over five years. As with past climate-related assistance, the fund relies entirely on voluntary contributions by donor countries. One issue for post-2012 is whether to establish a more predictable flow through firm funding commitments or through a mechanism such as a levy on international emissions trading. Another issue is how to give developing countries greater access to state-of-the-art technology while safeguarding intellectual property rights.

In all likelihood, the financial flows generated by a post-2012 agreement, whether direct or market-based, will cover only a fraction of the added cost of clean energy deployment in developing countries, an estimated \$65 billion in 2030.⁷ For that reason, it is essential that any incentives created are designed to maximally leverage the private finance (in-country and overseas) that will be needed to cover the rest.

*Adaptation*⁸

From its inception, the international climate effort has focused predominately on the mitigation side of the equation. There is broad recognition, however, that a post-2012 agreement must deliver stronger action on adaptation as well. The issue is in part the willingness of better-off countries to commit steady, substantial support. But the real challenge is how best to deploy those resources to facilitate climate resilience and response on the ground.

One complicating issue in crafting the international response is the impossibility in most cases of clearly distinguishing the effects of global warming from the effects of natural climate variability. While most might acknowledge direct cause and effect in the case of sea-level rise, warming's broader toll will be in intensifying the strength or frequency of otherwise ordinary weather events. "Responsibility" in these cases is harder to assess. Fortunately, the most effective response – be it an early warning system, a stronger building code, or a new drought-resistant crop – is often the same whether the risk is natural or human-induced. At a practical level, this argues for a comprehensive approach to reducing climate risks, regardless of their source, by "mainstreaming" or integrating adaptation into development decision-making and disaster preparedness and response.

This effort would extend well beyond the climate regime, as for instance, by approving multilateral development assistance only for projects that score well on climate resilience. But it is perhaps only within the climate regime that adaptation needs can gain sufficient political salience to leverage this broader response. A post-2012 agreement could advance adaptation on two fronts: proactively, by facilitating comprehensive national planning to reduce climate risk; and reactively, by helping especially vulnerable countries cope with the risks that remain.

⁷ UNFCCC, *Report on the Analysis of Existing and Potential Investment and Financial Flows Relevant to the Development of an Effective and Appropriate International Response to Climate Change*, Dialogue Working Paper 8, 2007. Available at http://unfccc.int/files/cooperation_and_support/financial_mechanism/financial_mechanism_gef/application/pdf/dialogue_working_paper_8.pdf.

⁸ This section is drawn from I. Burton, E. Diringer and J. Smith "Adaptation to Climate Change: International Policy Options" (Arlington, VA: Pew Center on Global Climate Change, 2006).

On the proactive front, the agreement can help needy, at-risk countries develop and implement comprehensive national adaptation strategies. Such strategies could identify climate risks (from both climate change and climate variability), existing and needed adaptation capacities, and high-priority implementation needs. It would also map out policies to incorporate climate risk management into development decision-making. The agreement could designate or establish a body to provide technical assistance and to assess the adequacy of a country's national strategy. Once its strategy is approved, a country could be eligible for implementation funding through the climate regime, and the strategy could serve as a basis for targeting other multilateral or bilateral assistance.

On the reactive side, a post-2012 agreement can establish an international response fund to assist countries suffering extreme and/or long-term climate impacts. At present, post-disaster assistance is largely ad hoc, with a new round of international pledging following each event. A fund supported by long-term funding commitments would enable a more predictable and timely response. It could narrowly target impacts directly attributable to climate change. Or a new fund could address the full range of climate-related disasters—from extreme weather events such as typhoons to long-term impacts such as sea-level rise—whatever their cause. In addition to addressing the direct impacts of climate change, this approach would help rationalize climate disaster assistance more generally by substituting regularized funding for reactive and unpredictable aid.

KEY POLITICAL CHALLENGES

Quite apart from the complexities of treaty architecture, governments face a number of critical political challenges on the road to Copenhagen and beyond, which are outlined below.

Developed Country Targets

The Bali Action Plan calls for “comparability of effort” among the developed countries. Comparability can be measured any number of ways—factors might include marginal abatement costs or willingness to support developing country efforts. But the most critical metric will be emissions, and, more specifically, the emissions target that each is willing to assume. A pivotal issue here is the base year against which emissions are measured.

In the Framework Convention, developed countries agreed on a voluntary aim (largely unmet) of reducing emissions to 1990 levels by 2000. The Kyoto Protocol also uses 1990 as a benchmark, with targets set as percentage reductions from (or, in a few cases, increases above) emission levels in that year. Continuing to rely on 1990 as the base year will make it difficult, however, to arrive at new targets that look fair. The European Union has said it will reduce emissions 20 percent below 1990 levels by 2020 (and more if other countries agree to comparable cuts). But U.S. emissions are now 15 percent above 1990 and, under most proposals before Congress, would still be above 1990 levels by 2020. Such a wide numerical gap—the U.S. at or above 1990 levels, and the EU 20 percent below—may be hard to justify.

One solution is to adopt a new base year. Measured against 2005 levels, the EU's target represents a reduction of 14 percent, roughly comparable to the cuts proposed in the more ambitious bills before Congress. Europe may feel that abandoning the 1990 base year it is losing credit for efforts already undertaken. But that may be a tradeoff needed to arrive at targets that appear reasonably equitable to all.

Crossing the Developed/Developing Country Divide

One of the most abiding features of the international climate effort has been an explicit distinction between the roles and responsibilities of developed and developing countries. Recognizing that wealthier countries bear greater historic responsibility for the buildup of greenhouse gases in the atmosphere, and that they have greater capacity to act, the Framework Convention sets out the principle of "common but differentiated responsibilities" and calls on developed countries to "take the lead" in addressing climate change.

This core principle, however, is not a static one, and a fair and effective post-2012 agreement requires a rebalancing of responsibilities to reflect new realities, most notably the soaring rise in developing country emissions. Developing countries now produce a majority of annual global emissions and, under business-as-usual scenarios, will account for 80 percent of the growth in energy-related emissions projected by 2030. A recalculation of respective responsibilities suggests it is time for the largest of the developing country emitters to assume binding international commitments.

This recalculation has yet to be openly accepted within the climate negotiations. The Bali Action Plan calls on developing countries to undertake "nationally appropriate mitigation actions," not commitments. But, importantly, it does not explicitly rule out commitments either (unlike the 1995 Berlin Mandate, which, in framing the negotiations that led to the Kyoto Protocol, expressly precluded new developing country commitments). To be certain, such commitments should be differentiated from those of developed countries in form, in level, and perhaps also in the means of verifying compliance. And it remains incumbent on developed countries to lead by shouldering (for now) the greater share of the burden. But to do so, they must know they can count on the major emerging economies to shoulder their share as well.

Balancing Scientific and Political Realities

The debate over long- and medium-term climate goals that played out in Bali, and again at the recent G8 summit, is bounded by two different realities. On one side is the growing body of scientific evidence that it may be too late to entirely avoid serious climate impacts, and that averting graver consequences requires a rapid peaking of global emissions, followed by a steep decline. On the other side is the political reality that, with only a few exceptions, publics and their governments are not yet prepared to undertake and sustain the enormous effort that this would entail.

As the scientific reality, assuming we understand it correctly, is fixed, our only choice for narrowing the gap is to reshape the political reality and launch the effort. It is entirely plausible, however, given the enormous momentum in the workings of our climate and our economies, that even our best efforts may not fully close the gap. The long-term targets

science would dictate may ultimately be beyond our reach. At this critical moment, though, the practical challenge is not to meet a given temperature or concentration target; it is to mobilize the quickest and strongest effort possible. Goals are most effective in motivating action if they are ones that can be achieved. In setting new climate goals, governments must be careful to balance these opposing realities, aiming for outcomes that are as ambitious as possible but still within reach.

THE OUTLOOK FOR COPENHAGEN

For a world in desperate need of an effective international climate effort, 2009 may offer the best opportunity in years, perhaps ever, for achieving real progress. But in establishing the Copenhagen deadline, a mere 10 months after the next U.S. president takes office, governments may have set themselves a formidable if not impossible task.

In all likelihood, a new U.S. president and policy will indeed begin to transform the global politics of climate change. But the transformation will not come overnight. There are, to begin with, the practical difficulties of organizing a new administration, and developing a politically viable climate policy, while also contending with an ailing economy, wars in Afghanistan and Iraq, and whatever other priorities might present themselves. It is only once a new administration has a clear policy and position, and is genuinely prepared to negotiate, that real treaty-crafting can begin. And given the profound stakes and complexities at hand, it will take time. A full-blown agreement by the time of Copenhagen is virtually unimaginable.

Realistically, the most governments may be able to achieve in Copenhagen is consensus on the basic framework of a post-2012 agreement, with the details to be filled in later. To be credible, such an interim agreement would have to spell out at a minimum have which countries would be assuming commitments, and of what type. But unless Congress had already passed mandatory climate legislation (an unlikely prospect) the United States would not be ready to commit to a specific emissions target. Thus it is unlikely that other countries would be prepared to specify the content of their commitments either.

Given the need for swift, strong action, such a limited outcome might readily be dismissed as a failure. But if it were to prove possible, a firm agreement that all the major economies are finally prepared to negotiate measurable and verifiable commitments would in fact be a major step forward. It would qualify Copenhagen as a success, and would for the first time lay a foundation upon which could be erected an equitable and effective post-2012 agreement.